

wherein the photosensitive resin composition is selected from the group consisting of (1) a negative-type photosensitive resin composition where the aromatic polyimide precursor comprises a repetitive unit having a monovalent organic group with a carbon-carbon unsaturated double bond on at least a part of side chains of carboxylic acid residues, and (2) a positive-type photosensitive resin composition where the aromatic polyimide precursor comprises a repetitive unit having a group represented by  $-OR^6$  or  $-NH-R^6$  on at least a part of side chains of carboxylic acid residues, provided that  $R^6$  is a monovalent organic group with no carbon-carbon unsaturated double bond.

## BEST AVAILABLE COPY

2. (Original) The photosensitive resin composition as claimed in claim 1, wherein the light transmittance at a wavelength of 365 nm is at least 5%.

A,  
cont.

3. (Original) The photosensitive resin composition as claimed in claim 1, wherein the aromatic polyimide precursor is soluble in an aqueous alkaline solution.

4. (Amended) A method for forming patterns, which comprises the steps of: applying a photosensitive resin composition onto a substrate and drying; exposing the composition using i-lines as a light source; developing the composition; and heating the composition, wherein the composition comprises a photosensitive resin composition comprising an aromatic polyimide precursor wherein a 10  $\mu m$  thick layer of the aromatic polyimide precursor has a light transmittance at a wavelength of 365 nm of at least 1%, and a 10  $\mu m$  thick polyimide film made from the resin composition by imidation ring closure and deposited on a silicon substrate has light transmittance at a wavelength of

~~365 nm of at least 1% and a residual stress of at most 25 MPa, wherein the photosensitive resin composition is selected from the group consisting of (1) a negative-type photosensitive resin composition where the aromatic polyimide precursor comprises a repetitive unit having a monovalent organic group with a carbon-carbon unsaturated double bond on at least a part of side chains of carboxylic acid residues, and (2) a positive-type photosensitive resin composition where the aromatic polyimide precursor comprises a repetitive unit having a group represented by  $-OR^6$  or  $-NH-R^6$  on at least a part of side chains of carboxylic acid residues, provided that  $R^6$  is a monovalent organic group with no carbon-carbon unsaturated double bond.~~

5. (Canceled)

*A*  
*cont* 6. (Amended) The patterning method as claimed in claim 45, wherein the substrate is a silicon wafer having a diameter of at least 12 inches.

7. (Original) An electronic component having a layer patterned according to the method of claim 4.

**BEST AVAILABLE COPY**

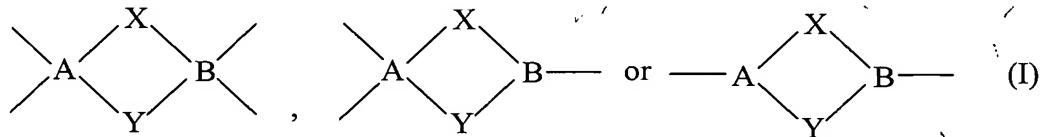
8. (Original) An electronic component as claimed in claim 7, wherein the component is a semiconductor device and the patterned layer is a surface-protecting film.

9. (Original) An electronic component as claimed in claim 7, wherein the patterned layer is an interlayer insulating film.

10. (NEW) The photosensitive resin composition as claimed in claim 1, wherein the monovalent organic group of the negative-type photosensitive resin composition is a group represented by  $-\text{ON}^+\text{HR}^4\text{R}^5\text{-R}^7$ , wherein  $\text{R}^4$  and  $\text{R}^5$  each independently represent a hydrocarbon group, and  $\text{R}^7$  represents a monovalent organic group having a carbon-carbon unsaturated double bond.

11. (NEW) The photosensitive resin composition as claimed in claim 3, wherein an amine residue in the repetitive unit of the aromatic polyimide precursor contains an alkali-developable group.

A2  
12. (NEW) The photosensitive resin composition as claimed in claim 1, wherein the aromatic polyimide precursor has structural units of the formula (I):



wherein A and B each independently represents a trivalent or tetravalent aromatic group; and X and Y each independently represents an at least divalent group not conjugating with A or B.

BEST AVAILABLE CO